

REMARKS

I. Introduction

Claims 1 to 15 are pending in the current application with claims 1 to 4 elected for further prosecution. Applicants respectfully submit that the elected claims presented in the application are patentable for the following reasons.

Applicants thank the Examiner for indicating that the Information Disclosure Statement, PTO-1449 and accompanying references have been considered.

II. Objection to the Drawings

The Office Action states that Figures 2 and 3 appear to be copies of photographs and states that color photographs and color drawings are acceptable only if a petition is filed under 37 CFR 1.84(a)(2).

Applicants acknowledge that if color photographs or color drawings are to be filed, that a petition under 37 CFR 1.84(a)(2) is required. Applicants further note that no objection to the drawings have been proposed.

III. Rejection of Claims 1 to 4 under 35 U.S.C. 112, second paragraph

Claims 1 to 4 were rejected under 35 U.S.C. 112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Office Action states that the following limitations "alignment pins", "top nozzle", "shaft", "lock fingers", "guide thimbles" and "divots" in claim 1 do not have proper antecedent basis. The Office Action further alleges that there is improper antecedent for claim 4 for the limitation "mandrel shaft". The Office Action further alleges that the generic term "fuel assembly" should be specified to the type of fuel assembly which has a "top nozzle" and "guide thimbles".

Applicants respectfully submit that claim 1 has been amended and currently reads to require at least two alignment pins engage a top nozzle of the fuel assembly. Applicants further submit that claim 1 recites that each of the features of a "top nozzle", a "shaft", "lock fingers", "guide tubes", "divots" and a "mandrel shaft" all are first recitations of these features and claim 1 complies with 35 U.S.C. 112,

second paragraph. Applicants have further amended claim 1 to recite that the method is appropriate to pressurized water reactor fuel assemblies. Applicants respectfully request withdrawal of the rejections under 35 U.S.C. 112, second paragraph.

II. Rejection of Claims 1 to 4 Under 35 U.S.C. §103(a)

Claims 1 to 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,834,934 ("Salton et al.") in view of U.S. Patent No. 4,699,760 ("Shellenberger et al. "). Applicants respectfully submit that claims 1 to 4 are patentable for the following reasons.

Claim 1 relates to a method of handling a pressurized water reactor fuel assembly. The method recites the steps of supporting a tool configured to handle the fuel assembly, positioning the tool over a top of the fuel assembly, lowering the tool onto the top of the fuel assembly such that at least two alignment pins engage a top nozzle of the fuel assembly, actuating a shaft to lower lock fingers into guide thimbles of the fuel assembly, positioning the lock fingers to a position below divots in the guide thimble in the fuel assembly to be engaged and engaging the lock fingers into the divots to an extended position; and lifting the fuel assembly and the tool. Claim 1 has been amended such that structural load of the lifted fuel assembly passes through the divots

Salton et al. relates to a thimble grip fuel assembly handling tool. Title. The Office Action at page 4, paragraph 3 admits that Salton et al. do not provide details regarding divots in guide thimbles. As a result, Salton et al. fail to disclose or suggest the method step of engaging lock fingers into divots to an extended position and lifting the fuel assembly and the tool.

The addition of Shallenberger et al. does not cure the defects of the Salton et al. reference. Shallenberger et al. relate to a fuel assembly skeleton with structural and non-structural top nozzle/guide thimble joints. Shallenberger et al. provide a modified top nozzle attachment which is compatible with fuel assembly skeletons containing several severed guide thimble upper end portions, or insert sleeves. A **non-structural** joint is substituted for the severed guide thimble portion which previously provided a structural joint with the top nozzle adapter plate. Col. 3, lines 41 to 47. Additionally, the slip fit member 50 being inserted into the guide tube is "non-structural". Col. 3, lines 52 to 59. Shallenberger et al., in fact, merely place a tube inside a guide tube. No method steps for lifting are disclosed. As a result, Shallenberger et al. fail to disclose or suggest the method step of engaging lock fingers into divots to an extended position and lifting the fuel assembly and the tool.

Shallenberger et al. install non-structural components in the guide tubes and itself is not directed to the field of lifting of the fuel assembly using guide thimbles. The sum of the references, therefore do not disclose or suggest any connection with passing structural load through the divots in the guide thimbles. The references, in fact, seek to accomplish the opposite, namely providing non-structural connections in guide tubes.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). As more fully set forth above, it is respectfully submitted that the combination of Salton et al. and Shallenberger et al. does not disclose, or even suggest, all of the limitations of claim 1. It is therefore respectfully submitted that the combination of Salton et al. and Shallenberger et al. does not render obvious claim 1.

Moreover, it is respectfully submitted that the cases of *In re Fine*, *supra*, and *In re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Office Action's generalized assertions that it would have been obvious to modify or combine the references do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of *In re Fine* stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

. . . .

Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Fine, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of *In re Jones* stated that: Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the present Office Action offers no evidence whatsoever, but only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to modify or combine references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for modifying or combining the references to provide the claimed subject matter.

More recently, the Federal Circuit in the case of *In re Kotzab* has made plain that even if a claim concerns a “technologically simple concept” — which is not the case here — there still must be some finding as to the “specific understanding or principle within the knowledge of a skilled artisan” that would motivate a person having no knowledge of the claimed subject matter to “make the combination in the manner claimed,” stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. *With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled*

artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper *prima facie* case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Again, it is believed that there have been no such findings.

Accordingly, there is no evidence that the references relied upon, whether taken alone, combined or modified, would provide the features and benefits of claim 1. It is therefore respectfully submitted that claim 1 is allowable for these reasons.

Claims 2 to 4 depend from claim 1 and therefore include all of the features of claim 1. Claims 2 to 4 are patentable for at least the reasons provided in relation to claim 1.

III. Conclusion

In view of the foregoing amendment and remarks, it is respectfully submitted that all pending claims of the present application are now in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited.

Respectfully submitted,

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